

REMARKS

Claims 1-7 and 27-31 are pending. Claims 1, 28, 29, 30, and 31 are independent claims.

All claims stand rejected as obvious over U.S. Patent 4,030,948 ("Berger") in view of Prior Art shown in Figure 2 of the present application ("PA"). The action concedes that "Berger does not explicitly disclose the component being a LED component having a plastic body/housing." (Action at page 2.) However, it argues that "[it] would have been obvious ... to employ a component being a LED having a plastic body as taught by PA to modify the component of Berger for the purpose of transmitting/receiving signal and reducing weight and low cost for manufacturing." (Action at page 3.) We traverse.

All of the pending claims require an "[e]lectronic component having a plastic housing ... the surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating." The action purports to find the claimed anti-solder coating in Berger as layer 34 in Figure 1. (See Action at page 2). Berger describes layer 34 as "an electrically insulating coating [] disposed on at least selected surface areas [] of the body 12" (col. 3, lines 38-40).

However, body 12 in Berger is not a "plastic housing" as required by the claims. To the contrary, body 12 is a "single crystal semiconductor material," which "has two, or more, regions 18 and 20 of alternate and opposite type conductivity." (See Berger at col. 3, lines 5-7 and 18-20, respectively.) "A P-N junction 22 is formed by the contiguous surfaces of each abutting pair of regions of opposite type conductivity [i.e., the regions 18 and 20]." (See Berger at col. 3, lines 20-22.) It is over the end portions 24 of this P-N junction that Berger coats the element with layer 34. (See Berger at col. 3, lines 38-41 and Figure 1.) Berger does not coat the layer to cover a surface of a *housing* for such a semiconductor element, let alone to cover a surface of a *plastic housing*, as claimed.

The secondary reference PA does nothing to address the shortcomings in Berger. While PA discloses a plastic housing for components such as semiconductor 10 in Berger, there is nothing in either reference to suggest coating the *housing* itself with a layer like layer 34. In

other words, while it may be obvious to put semiconductor element 10 of Berger inside the plastic housing 14 of PA, layer 34 would remain on the semiconductor body 12 of semiconductor element 10 - it would not cover a surface of the plastic housing, as required by the claims. Therefore, this proposed modification fails to render the claims unpatentable for obviousness because it does not include all of the claim limitations. See MPEP 2143.03.

On the other hand, if the Action is proposing to modify Berger to replace semiconductor body 12 with a plastic housing 14 as shown in PA to meet the claim limitations, the modification must also fail because the modification is completely contrary to function and purpose of semiconductor body 12 as taught by Berger. Berger teaches forming a P-N junction from semiconductor body 12 - this is what makes the element a working semiconductor device. To modify the semiconductor body 12 to be a plastic housing would render the device in Berger inoperable for its intended purpose. It well established that such modifications cannot form the basis of an obviousness rejection. See MPEP 2143.01.

Accordingly, we ask that the obviousness rejection be withdrawn and the application allowed.

Applicant : Hohn et al.
Serial No. : 09/830,038
Filed : April 20, 2003
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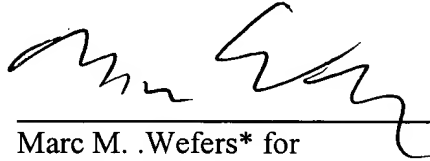
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Respectfully submitted,

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12/8/04



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***See attached document certifying that Marc M. Wefers has limited recognition to practice before the U.S. Patent and Trademark Office under 37 C.F.R. § 11.9(b).**